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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------------|--|----------------------|------------------------|------------------|--|
| 10/642,888 | 08/18/2003 | Ronald Steven Carson | 7784-000395DVA | 3343 | |
| 27572 | 7590 09/19/2006 | | EXAMINER | | |
| HARNESS, DICKEY & PIERCE, P.L.C. | | | LE, HOAN | LE, HOANGANH T | |
| | P.O. BOX 828 BLOOMFIELD HILLS, MI 48303 ART UNIT PAPE | | | PAPER NUMBER | |
| BLOOMFIELD HILLS, MI 48303 | | | 2821 | | |
| | | | DATE MAILED: 09/19/200 | 6 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|--|---|--|--|--|--|
| Office Action Occurrence | | 10/642,888 | CARSON, RONALD STEVEN | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | | HoangAnh T. Le | 2821 | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| WHIC - Exter after - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFF SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory pere to reply within the set or extended period for reply will, by steeply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION R 1.136(a). In no event, however, may a reply be tin riod will apply and will expire SIX (6) MONTHS from atute, cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1) | Responsive to communication(s) filed on _ | | | | | |
| · | | 2b)⊠ This action is non-final. | | | | |
| 3) | , - | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositi | on of Claims | | | | | |
| 4)🖂 | 4)⊠ Claim(s) <u>1-24</u> is/are pending in the application. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ | S)⊠ Claim(s) <u>1-24</u> is/are rejected. | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | |
| 8)[| Claim(s) are subject to restriction an | d/or election requirement. | | | | |
| Applicati | on Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) | The drawing(s) filed on is/are: a) ☐ a | accepted or b) objected to by the | Examiner. | | | |
| | Applicant may not request that any objection to | the drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. Hoanganh Le Primary Examiner | | | | | | |
| | | | Hoanganh Le | | | |
| (illiary — · | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notic | e of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | ate | | | |
| | Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application Other: | | | | | |
| | | _ | | | | |

DETAILED ACTION

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Halsema et al (the US Patent No. 6,606,055).

The Halsema et al reference teaches in figures 2-4 a method for operably applying a phased array antenna system for a mobile platform, the method comprising: disposing a transmit antenna 60 within at least one antenna housing 22, locating a receive antenna 60 within the at least one antenna housing 22, converting a receive antenna signal to an aircraft communication frequency signal within the at least one antenna housing; changing the aircraft communication frequency signal into a transmit antenna signal within the at least one antenna housing, and transmitting the transmit antenna signal from the transmit antenna (figure 3). Figure 3 shows positioning a converter within each antenna housing, connecting an aircraft transfer power with the

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converter; and converting the aircraft transfer power to a phased array antenna power with the converter. Figure 3 shows a first frequency converter within the al least one antenna housing, and converting the receive antenna signal to the aircraft communication frequency signal with the first frequency converter. Figures 3 and 4 show a second frequency converter within the at least one antenna housing; and converting the aircraft communication frequency signal to the transmit antenna signal with the second frequency converter. Figure 3 shows the at least one antenna housing as a receive antenna housing and a transmit antenna housing, locating the first frequency converter within the receive antenna housing, and positioning the second frequency converter within the transmit antenna housing. The receive antenna signal from a frequency ranging from approximately 12 GHZ to approximately 20 GHz; operating the aircraft communication frequency of approximately 1 GHz; and frequency signal at a transmitting the transmit antenna signal at a frequency ranging from approximately 14 GHZ to approximately 44 GHz (col. 5, lines 20-27). Figure 4 shows antennas discs.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Moauganh Le Primary Examiner